Chapter 6: Mitigation

6.1 Introduction

This chapter presents SEA's preliminary recommended mitigation. Based on the information available to date; consultations with appropriate Federal, state, and local agencies; the public; Federally recognized tribes; and extensive environmental analysis, SEA considered preliminary mitigation measures to address the expected environmental impacts of construction and operation of the proposed rail line.

Under 49 U.S.C. 10502, the Board granted conditional approval for the Central Utah Rail Proposed Action. However, in granting this approval, the Board explained that the project could not be finally approved until the environmental review process, required under NEPA and related laws, is completed and the Board has the opportunity to fully assess the potential environmental effects of the project. The Board made clear in its decision that it would issue a further decision on the entire proposed project following the completion of the EIS process and that no new construction could begin until a final decision approving the construction is issued and has become effective.

Because alternatives have not been selected and design of the proposed rail line is not complete, mitigation is discussed in broad terms for both proposed Build Alternatives.

6.2 Overview of SEA's Approach to Recommended Mitigation

In conducting the environmental review process, SEA has evaluated the environmental consequences of the Applicant's proposal as required by NEPA. SEA's review included the construction and operation of a new railroad line in central Utah. In its environmental review, SEA conducted a thorough and comprehensive analysis of the expected environmental effects associated with the Proposed Action and Alternatives. Chapter 1, Description of the Proposed Action and Purpose and Need, and Appendix J, Agency and Tribal Consultation, provide information on SEA's consultation activities.

6.2.1 Limits of the Board's Conditioning Power

The Board has limited authority to impose conditions to mitigate potential environmental impacts. As a government agency, the Board can impose only those conditions that are consistent with its statutory authority. Accordingly, any conditions the Board imposes must relate directly to the transaction before it, must be reasonable, and must be supported by the record before the Board.

Thus, the Board's practice consistently has been to mitigate only those impacts that result directly from the Proposed Action. The Board typically does not require mitigation for pre-existing environmental conditions.

However, SEA notes that CEQ, which oversees the implementation of NEPA, has stated in Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations that:

[A]ll relevant, reasonable mitigation measures that could improve the project are to be identified, even if they are outside the jurisdiction of the lead agency or the cooperating agencies, and thus would not be committed as part of the RODs [Records of Decision] of these agencies (Sections 1502.16(h), 1505.2(c)). This will serve to alert agencies or officials who can implement these extra measures, and will encourage them to do so. Because the EIS is the most comprehensive environmental document, it is an ideal vehicle in which to lay out not only the full range of environmental impacts but also the full spectrum of appropriate mitigation [46 Federal Register 18032].

Therefore, this chapter identifies the regulatory requirements that BLM and other agencies could impose on the Proposed Action and Alternatives and that could mitigate the environmental effects.

6.2.2 Role of Cooperating Agencies in Developing Proposed Environmental Mitigation Measures

In addition to assisting in SEA's environmental analysis, BLM as a cooperating agency participated in developing preliminary recommended mitigation. In particular, BLM developed mitigation measures to protect BLM-administered public land and resources in the project area.

The associated BLM right-of-way grant UTU-80737 would be issued subject to regulations under 43 CFR 2800 and mitigating stipulations that are either required by policy, law, or regulation or are needed to ensure mitigation of associated surface disturbance activities.

In addition to the mitigation stipulated in this Draft EIS, BLM may impose stipulations on its right-of-way grant which may include, but not be limited to: requirements for restoration, revegetation, and curtailment of erosion of the surface of the land, or any other rehabilitation measures determined necessary regarding extent, duration, survey, location, construction, operation, maintenance, use, and termination. Requirements designed to control or prevent damage to scenic, aesthetic, cultural, and environmental values including damage to fish and wildlife habitat, damage to Federal property, and hazards to public health and safety may also be imposed.

According to BLM regulations, the Applicant would be required to secure all relevant permits for use of Federal public lands prior to beginning construction activities.

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6.2.3 Role of Native American Tribes in Developing Environmental Mitigation Measures

In April 2003, SEA contacted seven Federally recognized tribes as well as tribal bands including the Paiute Indian Tribe (Koosharem, Kanosh, Cedar, Indian Peaks, and Shivwits Bands), the Ute Indian Tribe, the Goshute Indian Tribe, the Skull Valley Band of Goshute Indians, and the Hopi Tribe to request their input regarding the project including any potential environmental impacts of which they might be aware. Members of these tribes were subsequently invited to attend scoping meetings and a site visit to the project area on May 20, 2003.

In January 2005, SEA reinitiated its contact with the above tribes in order to invite them to participate as consulting parties pursuant to Section 106 of the National Historic Preservation Act and to seek their input regarding the identification of the 55 prehistoric and historic sites that SEA identified within the project area. (See Section 3.12, Cultural Resources, for a summary of the cultural resources identified.) SEA asked the tribes whether any of the identified sites might have traditional or religious cultural significance. The Hopi Tribe, Paiute Indian Tribe of Utah, and Kanosh Band, Southern Paiute Tribe, have each stated to SEA their interest in participating as Section 106 consulting parties. (Follow-up calls to the remaining four tribes confirmed that they were not interested in participating as consulting parties for the project.)

Federally recognized tribes identified in the 2003 Tribal Consultation Plan as having an interest in the project area include the Ute Indian Tribe, the Paiute Indian Tribe of Utah, the Goshute Indian Tribe, the Skull Valley Band of Goshute Indians, and the Hopi Tribe (see Appendix C, Tribal Consultation Plan). The Navajo Nation was also identified as having an interest in the project area in 2003 during scoping meetings held in May of that year.

In 2006, SEA identified additional Federally recognized tribes that would have an interest in the project area including the Southern Ute Tribe of Colorado, Ute Mountain Ute of Colorado, San Juan Southern Paiute of Arizona, Kaibab Paiute Tribe of Arizona, and Moapa Band of Paiute Indians of Nevada.¹

In May 2006, SEA sent letters (including the cultural resource report) to interested tribes. These letters asked for the tribes' input regarding their assessment of the eligibility of the cultural resources identified by SEA for the National Register of Historic Places (National Register) and the potential effects of the project on historic properties. The letters also asked whether any of the sites are important to the tribe as traditional cultural properties.

No written response was received from the Paiute Indian Tribe of Utah or the Kanosh Band, Southern Paiute Tribe. However, in follow-up calls to these tribes, both stated their continued interest in being included as Section 106 consulting parties for the project. The Hopi Tribe

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¹ The Bureau of Land Management provided SEA with an expanded list of tribal contacts in 2006.

has stated in writing that it concurs with SEA's National Register eligibility determinations for the identified sites. The Hopi Tribe also requests that they be included in further Section 106 consultations regarding the development of a treatment plan to mitigate any adverse effects to historic properties that are eligible for the National Register.

6.2.4 Voluntary Mitigation and Negotiated Agreements

SEA encourages Applicants to propose voluntary mitigation. In some situations, voluntary mitigation might replace mitigation measures that the Board might otherwise impose, or it could supplement mitigation that the Board might impose. Because applicants gain a substantial amount of knowledge about the issues associated with a proposed right-of-way during project planning and because they consult with regulatory agencies during the permitting process, they are often in a position to offer relevant voluntary mitigation. For the Proposed Action and Alternatives, the Applicant has proposed voluntary mitigation, which is discussed further below.

6.2.5 Preliminary Nature of Environmental Mitigation

SEA emphasizes that the recommended environmental mitigation measures in the Draft EIS are preliminary, and it invites public and agency comments on these proposed environmental mitigation measures. In order for SEA to assess the comments effectively, it is critical that parties submitting comments be specific regarding any desired mitigation and the reasons why the suggested mitigation would be appropriate.

SEA will make its final recommendations on environmental mitigation to the Board in the Final EIS after considering all public comments on the Draft EIS. The Board will then make its final decision regarding this project and any environmental conditions it might impose. In making its decision, the Board will consider the Draft EIS, the Final EIS, public comments, and SEA's final environmental mitigation recommendations.

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6.3 Preliminary Environmental Mitigation Measures

For the environmental resource areas discussed below, if SEA concluded that the impacts are negligible, no mitigation is proposed (see Section 6.2, Overview of SEA's Approach to Recommended Mitigation).

6.3.1 Rail Operations and Safety

1. Applicant shall comply with the safety regulations implemented and enforced by the Federal Railroad Administration. SEA has determined that the Proposed Action and Alternatives would have a negligible effect on rail operations and safety. Section 3.1.8, Rail Safety, discusses the regulations governing rail operations and safety.

6.3.1.1 Pipeline Safety

2. Applicant shall comply with the regulations implemented and enforced by the Office of Pipeline Safety. SEA has determined through its analysis and consultation with Utah Department of Transportation (UDOT) that the Proposed Action and Alternatives would have a negligible effect on pipeline safety.

6.3.1.2 Grade Crossings Delay and Safety

- 3. Applicant shall consult with appropriate Federal, state and local transportation agencies to determine the final design and other details of any appropriate grade-crossing warning devices. Implementation of all grade-crossing warning devices on public roadways will be subject to the review and approval of the Utah Department of Transportation and Juab, Sevier, and Sanpete Counties.
- 4. Applicant shall coordinate with UDOT and Juab, Sevier, and Sanpete Counties to minimize delay during grade crossing construction.

6.3.2 Land Use

5. Applicant shall comply with all Federal and state regulations that apply to land use, as practicable, in the project area. Section 3.2, Land Use, discusses the regulations that apply to land use.

6.3.2.1 Agriculture

- 6. Applicant shall work with farmers to remedy any damage to crops caused by the Applicant's construction and operation activities related to the project.
- 7. Applicant shall provide its construction schedule to affected farmers and ranchers to allow them to determine whether they should continue to farm areas or discontinue farming due to impending construction activities related to the project.

6.3.2.2 Grazing Allotments

- 8. Applicant shall work with ranchers to remedy any damage to pastures or rangelands caused by the Applicant's construction or reconstruction activities related to the project.
- Applicant shall negotiate with farmers and ranchers regarding the possibility of train-free
 periods to facilitate movement of equipment of livestock from one side of the rail line to
 the other.

6.3.3 Biological Resources

10. Applicant shall notify STB and the U.S. Fish and Wildlife Service (USFWS) if any Federally listed threatened or endangered species are discovered during construction activities. USFWS has determined that the Proposed Action and Alternatives would have negligible effects on plant communities and the spread of noxious weeds as well as wildlife resources and threatened, endangered, and sensitive species. SEA has determined that the Applicant's proposed voluntary mitigation would provide reasonable mitigation for impacts associated with the Proposed Action and Alternatives.

6.3.4 Water Resources

- 11. Applicant shall work with BLM to mitigate any potential impacts to groundwater wells near the Painted Rocks Campground and any other groundwater wells in the project area.
- 12. Applicant shall be responsible for bringing the wells and water system back into compliance if construction or operation of the rail line affects wells and/or water systems.
- 13. Applicant shall design the Build Alternatives according to the applicable standards of the floodplain programs administered by Sanpete and Sevier Counties.

6.3.5 Topography, Geology, and Soils

14. Applicant shall secure all relevant permits for use of public lands prior to beginning construction activities on public land.

6.3.6 Vibration Impacts

15. Applicant shall monitor vibration levels during construction activities to ensure that building and water wells are not impacted.

6.3.7 Hazardous Materials

- 16. Applicant shall maintain the right-of-way in a sanitary condition during all construction, operation, maintenance, and termination activities.
- 17. Applicant shall ensure that waste materials are removed and disposed of promptly at an appropriate waste-disposal site.

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18. Applicant shall ensure that gas, diesel fuel, oil, lubricants, and other petroleum products shall be handled and stored in such a manner as to prevent them from entering into and contaminating soils on the public land. Should petroleum spills occur within the described area as a result of construction, maintenance, and termination activities, the Applicant shall be responsible for cleaning up any spills in accordance with Federal and state regulations.

6.3.8 Air Quality

19. Applicant shall comply with applicable Federal and state air quality regulations. Section 3.8, Air Quality, discusses the regulations governing air quality.

6.3.9 Noise

20. Applicant shall monitor noise levels within the project area of impact to ensure that project-related noise levels do not impact sensitive noise receptors.

6.3.10 Energy Resources

21. Applicant shall ensure that energy resources are not adversely impacted by the proposed project. SEA has determined that the Proposed Action and Alternatives would have a positive effect on energy resources by reducing the average daily energy consumption in the project area.

6.3.11 Socioeconomics

22. SEA has determined that the Proposed Action and Alternatives would have a negligible effect on long-term socioeconomic conditions because the railroad is expected to bring economic development to the region over 20 years. There would be a loss of trucking jobs that would be partially offset by the addition of railroad construction and operation jobs.

6.3.11.1 Community Facilities

- 23. Applicant shall, prior to initiation of construction activities related to this project, establish a Community Liaison to consult with affected communities, businesses, and agencies; develop cooperative solutions to local concerns; be available for public meetings; and conduct periodic public outreach for a period of 1 year following start-up of operations on the new line.
- 24. Applicant shall provide the name and phone number of the Community Liaison to appropriate local officials in communities through which the new line passes.

6.3.12 Cultural and Paleontological Resources

- 25. Applicant shall resolve adverse effects to historic properties in consultation with the appropriate Section 106 consulting parties including the applicant; the State Historic Preservation Officer; Federally recognized tribes; BLM; the public; and state, Federal, and local governments, as appropriate. SEA shall develop a Memorandum of Agreement to stipulate the resolution of adverse effects pursuant to 36 CFR 800.6(B) in cooperation with BLM, SHPO, and other consulting parties.
- 26. Applicant shall ensure that, if any paleontological resources are discovered during construction, all operations affecting such sites shall be immediately suspended. STB will be notified within 48 hours of the discovery, and a decision as to the preferred course of action will be made by STB. If any paleontological resources are discovered on Federal public lands, a decision as to the preferred course of action will be made by BLM.

6.3.13 Environmental Justice Communities

27. SEA has determined that there are no environmental justice populations in the project area, so the Proposed Action and Alternatives would have no effect on environmental justice populations.

6.3.14 Recreation

28. Applicant shall coordinate with the United States Forest Service and BLM to ensure that impacts to the Paiute ATV Trail are addressed to reduce or avoid impacts as practicable. Applicant's voluntary mitigation should further reduce impacts to the trail. SEA has determined that the Proposed Action and Alternatives would have a negligible effect on recreation.

6.3.15 Federal Public Lands

Applicant's mitigation measures for impacts to Federal public lands will comply with the most recent Federal land use policies, regulations, and procedures. In addition to the mitigation recommended by STB and the voluntary mitigation provided by the Applicant in Section 6.4, BLM recommends the following mitigation measures for construction, operation, and termination activities on Federal public lands:

- 29. Applicant shall secure all relevant Federal, state, and local permits prior to beginning construction activities.
- 30. Applicant shall centerline-stake and clearly mark the exterior boundary of the right-of-way area prior to beginning construction activities.

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- 31. Applicant shall ensure that all activities associated with the construction, operation, maintenance, and termination of the proposed project is confined to within the authorized limits of the described right-of-way area, unless otherwise approved in writing by BLM.
- 32. Applicant shall ensure that surveys for specific species are conducted prior to construction, if required. These surveys will be conducted following BLM-approved protocols and regulations. Also, if appropriate, mitigation measures from recovery plans, conservation plans, or conservation agreements will be implemented in cooperation with BLM and state and Federal wildlife agencies.
- 33. Applicant shall be responsible for any repair of existing facilities which may be damaged during operation, maintenance, or termination of this right-of-way will be repaired or restored to the same condition as existed prior to the damage.
- 34. Applicant shall obtain the prior written approval of BLM if, at any time after the grant to cross Federal public land, the Applicant wishes to reconstruct, remodel, or relocate any portion of the right-of-way or change, modify, or add improvements or facilities.
- 35. Applicant shall ensure full compliance with the terms, conditions, and stipulations of any BLM right-of-way grant. Failure or refusal of the Applicant's agents, employees, contractors, subcontractors, or their employees to comply with the terms, conditions, and stipulations will be the ultimate responsibility of the Applicant.
- 36. Applicant shall meet with BLM to arrange a joint inspection of the right-of-way when the grant to cross Federal public land is no longer needed, and prior to abandonment of the facilities. The inspection will be held to agree on an acceptable abandonment and rehabilitation plan. BLM must approve the plan in writing prior to the Applicant commencing any abandonment and/or rehabilitation activities.

6.4 Applicant's Voluntary Mitigation Measures

In consultation with local interests and agencies, the Applicant developed the following voluntary mitigation measures for the Board to consider in issuing its final decision. The voluntary mitigation measures offer substantial mitigation that the Applicant believes will address many of the concerns that have been raised by the community and Federal, state, and local agencies.

6.4.1 Rail Operations

6.4.1.1 Grade Crossing and Speed

1. As agreed to by the Applicant, Applicant shall consult with appropriate Federal, state, and local transportation agencies to determine the final design and other details of the grade-crossing warning devices and the grade separations on public roadways. Implementation of all grade-crossing warning devices on public roadways will be subject to the review

- and approval of reasonable warning devices by UDOT and Juab, Sanpete, and Sevier Counties (see Table 6.4-1).
- 2. As agreed to by the Applicant, Applicant shall also consult with private landowners to determine the final details of reasonable warning signs on grade crossings on private roads.

Table 6.4-1. Applicant's Proposed Highway/Rail Grade-Crossing Mitigation

Roadway	Type of Crossing Warning Device
US 89	Grade-separated crossing (no device required)
US 24 south of Salina	Automatic crossing gates
US 50 west of Salina	Automatic crossing gates
SH 78 west of Levan	Flashing lights
Other rural paved roads	Signs
Other rural unpaved roads	Signs

6.4.1.2 Construction Traffic

- 3. As agreed to by the Applicant, Applicant shall confine all project-related construction traffic to a temporary access road within the right-of-way or established public roads. Where traffic cannot be confined to temporary access roads or established public roads, the Applicant will make necessary arrangements with landowners to gain access from private roads.
- 4. As agreed to by the Applicant, Applicant shall ensure that proposed activities within and along existing roads are consistent with the Manual of Uniform Traffic-Control Devices for installation of signs (regulatory, warning/caution, speed, and so on), delineators, and other roadway appurtenances and in compliance with the terms and conditions of any BLM right-of-way grant and AASHTO safety standards.
- 5. As agreed to by the Applicant, Applicant shall ensure that temporary access roads are used only during project-related construction. Any temporary access roads constructed outside the rail line right-of-way will be removed and restored after construction is completed unless otherwise agreed to with the landowners.

6.4.2 Land Use

6.4.2.1 General Land Use

6. As agreed to by the Applicant, Applicant shall ensure that land areas that are directly disturbed by Applicant's project-related construction shall be restored to their original

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- condition, as may be reasonably practicable, upon completion of project-related construction.
- 7. As agreed to by the Applicant, Applicant shall erect temporary construction fencing, where appropriate, before project-related construction begins. The Applicant shall inspect temporary construction fencing regularly and promptly repair any damage.
- 8. As agreed to by the Applicant, Applicant shall install permanent fencing, where appropriate. The Applicant shall consult with BLM, the Utah Department of Natural Resources, other local agencies, and affected landowners to determine appropriate fencing locations and designs. The Applicant shall inspect all fencing regularly and promptly repair any damage.
- 9. As agreed to by the Applicant, Applicant shall provide access to Federal public land and ensure that the roads are not permanently blocked or closed.
- 10. As agreed to by the Applicant, Applicant shall ensure that recreational routes crossed by the Proposed Action and Alternatives will be signed for safety.
- 11. As agreed to by the Applicant, Applicant shall require constructors to remove all trash and debris generated as a result of the project from public land and discarded at an authorized facility.
- 12. As agreed to by the Applicant, Applicant shall require contractors to dispose of waste generated during project-related construction activities in accordance with all applicable Federal, state and local regulations.

6.4.2.2 Grants and Leases

- 13. As agreed to by the Applicant, Applicant shall obtain a lease with the Utah School and Institutional Trust Lands Administration for construction of the rail line to cross land owned by the State of Utah. Any conditions required under this lease, in addition to those imposed by the Board, will be followed by the Applicant for activities on state lands.
- 14. As agreed to by the Applicant, Applicant shall obtain a right-of-way grant from BLM granting an easement for the rail line to cross lands administered by the BLM before any project-related construction activities begin on BLM lands. Any conditions required under this easement, in addition to those imposed by the Board, will be followed by the Applicant for activities on BLM lands.

6.4.2.3 Agriculture

No additional mitigation measures are suggested for impacts to agricultural resources.

6.4.2.4 Grazing Allotments

- 15. As agreed to by the Applicant, Applicant shall put in place temporary fences during construction to allow continued grazing, if practicable.
- 16. As agreed to by the Applicant, Applicant shall replace all permanent fences removed during construction once construction is completed.
- 17. As agreed to by the Applicant, Applicant shall retain or replace cattle guards, gates, and drainage crossings used as livestock passageways as needed once construction is completed.
- 18. As agreed to by the Applicant, Applicant shall evaluate whether existing gates on existing side roads used to access grazing allotments might need to be upgraded with properly sized cattle guards to accommodate increased present and future traffic. Where deer fencing is installed, cattle access needs will be considered in the fence design.
- 19. As agreed to by the Applicant, Applicant shall maintain livestock access to water sources, vehicle and livestock access to the allotments, safety fencing, and signage for grazing allotment entrances and exits to enable livestock operations on BLM grazing allotments to continue.

6.4.2.5 Utilities and Valid Prior Existing Rights-of-Way

- 20. As agreed to by the Applicant, Applicant shall make reasonable efforts to identify all utilities and valid prior existing rights-of-way (including rangeland allotment developments) located within and adjacent to the rail line right-of-way or that cross the rail line right-of-way.
- 21. As agreed to by the Applicant, Applicant shall, before project-related construction begins, notify the owner of each identified utility and coordinate with the owner to avoid or minimize damage to utilities.
- 22. As agreed to by the Applicant, Applicant shall consult with utility owners to design the rail line so that the utilities are protected during project-related construction and subsequent maintenance and operation of the rail line.
- 23. As agreed to by the Applicant, Applicant shall promote the safety of construction workers and avoid interruption of electricity transmission, and ensure that regulations of the Occupational Safety and Health Administration and the Utah Overhead Line Safety Act will be followed.
- 24. As agreed to by the Applicant, Applicant shall coordinate with PacifiCorp and Rocky Mountain Power utilities prior to beginning construction activities to ensure that all appropriate regulations are followed, especially when operating large equipment such as cranes near a transmission line right-of-way.

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6.4.3 Biological Resources

- 25. As agreed to by the Applicant, Applicant shall work with the State of Utah if any land needs to be taken at the Yuba Lake Recreation Area and the Redmond WMA for construction and operation of the rail line. The Applicant shall negotiate in good faith for the appropriate compensation or exchange acreage to compensate the State for any loss in acreage.
- 26. As agreed to by the Applicant, Applicant shall use temporary barricades, fencing, and/or flagging, as needed, to contain project-related impacts to the area within the construction right-of-way. Where possible, staging areas will be located on previously disturbed sites. However, staging areas will not be established in sensitive habitat areas.
- 27. As agreed to by the Applicant, Applicant shall install culverts at surface water crossings as needed along the rail line to maintain hydrologic connectivity of surface flows from west of Redmond WMA that are crucial to the maintenance and health of the wetland habitat in the area.
- 28. As agreed to by the Applicant, Applicant shall use BMPs that require all contractors to conduct daily inspections of all equipment for any fuel, lube oil, hydraulic, or antifreeze leaks. If leaks are found, the Applicant will require the contractor to immediately remove the equipment from service and repair or replace it.
- 29. As agreed to by the Applicant, Applicant shall revegetate as needed any areas that are stripped of existing vegetation with desirable species (such as perennial species that are native to the region) using certified weed-free seed.
- 30. As agreed to by the Applicant, Applicant shall implement a noxious-weed-control program during construction and operation of the new rail line. A combination of seeding, mechanical weed control and chemical weed control mechanisms will be used. All herbicides will be approved by United States Environmental Protection Agency. The Applicant will make reasonable attempt to notify residents of property adjacent to the right-of-way before the herbicides are used.
- 31. As agreed to by the Applicant, Applicant shall maintain the right-of-way to reduce the potential for uncontrolled wildfires. This maintenance could include reducing or eliminating vegetation accumulation within the right-of-way or seeding fire-resistant species of drought-tolerant plants that are suitable to the ecosystem.
- 32. As agreed to by the Applicant, Applicant shall mitigate potential impacts to raptors, the Applicant shall implement management practices from the *Utah Field Office Guidelines* for Raptor Protection from Human and Land Use Disturbances (Romin and Muck 2002).
- 33. As agreed to by the Applicant, Applicant shall employ BMPs including bank stabilization and erosion-control measures to protect fish habitat.

- 34. As agreed to by the Applicant, Applicant shall mitigate potential impacts to the least chub and the leatherside chub. The crossing structure for the Sevier River shall be designed to avoid or minimize impacts to the river channel, stream banks, active floodplain, and riparian vegetation. Guidelines from the USFWS conservation agreement for the least chub will be implemented.
- 35. As agreed to by the Applicant, Applicant shall take into consideration wildlife migration underpasses and escape ramps when designing and installing fences along the right-of-way. The locations of these structures will be determined during final design in consultation with the Utah Division of Wildlife Resources (UDWR) and USFWS.
- 36. As agreed to by the Applicant, Applicant shall consult with UDWR during the rail line design to provide reasonable enhancement (in-lieu fees, reseeding, restoration) to portions of the deer winter range to replace habitat lost from the construction of the rail line and to attract the animals to the enhanced range and away from the rail line.

6.4.4 Water Resources and Wetlands

- 37. As agreed to by the Applicant, Applicant shall use proper design and construction BMPs, including erosion control, to reduce the amount of sediment and pollutants entering surface waters, groundwater, and waters of the U.S. The Applicant shall require its construction contractor to follow all mitigation measures required in all permits obtained, including the Section 404 Permit from United States Army Corps of Engineers and the Section 401 Water Quality Certificate from Utah Department of Environmental Quality.
- 38. As agreed to by the Applicant, Applicant shall, in conjunction with Executive Order 11988, Floodplain Management, not place any dredge, fill, or bridge structures within the ordinary high-water mark of the Sevier Bridge Reservoir or Redmond Lake or within the 100-year floodplain of the Sevier River.

6.4.5 Topography, Geology, and Soils

- 39. As agreed to by the Applicant, Applicant shall secure all relevant permits for use of public lands prior to beginning construction activities on public land.
- 40. As agreed to by the Applicant, Applicant shall limit ground disturbance to only the areas necessary for project-related construction activities.
- 41. As agreed to by the Applicant, Applicant shall, during project-related earthmoving activities, require the contractor to remove topsoil and segregate it from subsoil. The contractor shall also stockpile topsoil to be applied later during reclamation of disturbed areas along the right-of-way. The contractor will place the topsoil stockpiles in areas that would minimize erosion and will use appropriate erosion-control measures around all stockpiles to prevent erosion.

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- 42. As agreed to by the Applicant, Applicant shall, during construction activity, take reasonable steps to ensure that its contractors use fill material appropriate for the project area.
- 43. As agreed to by the Applicant, Applicant shall begin reclamation of disturbed areas as soon as practicable after project-related construction ends along a particular stretch of rail line. The goal of reclamation will be the rapid and permanent re-establishment of native ground cover on disturbed areas. If weather or the season prevents vegetation from being quickly re-established, the Applicant will use measures such as mulching or erosion-control blankets to prevent erosion until vegetative cover is established. The Applicant shall monitor reclaimed areas for 3 years. For those areas where efforts to establish vegetation cover has been unsuccessful after 1 year, the Applicant shall reseed annually for up to 3 years if needed.

6.4.6 Hazardous Materials

- 44. As agreed to by the Applicant, Applicant shall develop a spill-prevention plan before initiating any project-related construction activities for handling the release of petroleum products or other hazardous materials during construction activities.
- 45. As agreed to by the Applicant, Applicant shall in the event of a spill, provide local officials a list of government agencies and the Applicant's management personnel to be contacted. In the event of a reportable spill, the Applicant will comply with its spill prevention plan and applicable Federal, state, and local regulations pertaining to spill containment and appropriate clean-up.
- 46. As agreed to by the Applicant, Applicant shall require its construction contractor to implement measures to ensure that workers and the environment are protected if undocumented hazardous materials are encountered. All activities associated with hazardous material spill sites and hazardous waste sites will be documented, and the appropriate local and state regulatory agencies will be notified according to applicable regulations. The measures will ensure the proper handling and disposal of contaminated materials including contaminated soil, groundwater, and storm water, if such materials are encountered.

6.4.7 Air Quality

47. As agreed to by the Applicant, Applicant shall reduce fugitive-dust emissions created during project-related construction activities, and implement appropriate fugitive-dust-suppression controls such as spraying water or other approved measures. The Applicant's construction contractor shall also regularly operate water trucks on haul roads to reduce dust.

48. As agreed to by the Applicant, Applicant shall work with its contractors to make sure that construction equipment is properly maintained and that mufflers and other required pollution-control devices are in working condition in order to limit construction-related air emissions.

6.4.8 Noise

- 49. As agreed to by the Applicant, Applicant shall comply with FRA regulations that establish decibel limits for train operations and locomotive noise standards.
- 50. As agreed to by the Applicant, Applicant shall work with its construction contractors to minimize, to the extent practicable, construction-related noise disturbances near any residences.
- 51. As agreed to by the Applicant, Applicant shall maintain project-related construction and maintenance vehicles in good working order with properly functioning mufflers to control noise.
- 52. As agreed to by the Applicant, Applicant shall install rail lubrication systems at curves where doing so would reduce the noise experienced at residences.

6.4.9 Socioeconomics

6.4.9.1 Community Outreach

53. As agreed to by the Applicant, Applicant shall, before beginning construction activities related to this project, notify local communities, counties, and landowners about construction timeframes and disturbances.

6.4.9.2 Landowners

54. As agreed to by the Applicant, Applicant shall ensure that project-related construction vehicles, equipment, and workers will not access work areas by landowners' properties without the permission of the property owners. In the unlikely event of any inadvertent damage, the Applicant will work with affected landowners to appropriately redress any damage to each landowner's property caused by the Applicant's project-related construction activities.

6.4.9.3 Emergency Response

55. As agreed to by the Applicant, Applicant shall, at least 1 month before the beginning of construction activities in the project area, provide project-related construction information regarding the sequence of construction of public grade crossings and the approximate schedule for these activities at each crossing, as well as any additional information as appropriate, to emergency response providers in Levan, Gunnison, Salina, Nephi, Manti, and Sigurd and the Park Manager at Yuba Lake Recreation Area.

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56. As agreed to by the Applicant, Applicant shall, before the start of railroad operations, contact the emergency response providers in Gunnison, Salina, Nephi, Manti, and Sigurd and the Park Manager at Yuba Lake Recreation Area with information on the proposed operations to allow the local communities and counties incorporate the information into local response plans.

6.4.10 Cultural and Paleontological Resources

57. As agreed to by the Applicant, Applicant shall inform construction supervisors of the importance of protecting archeological resources, graves, and other cultural resources and how to recognize and treat these resources.

6.4.11 Recreation

- 58. As agreed to by the Applicant, Applicant shall install rail crossing signs at the Painted Rocks Campground crossing and at an at-grade crossing for the Painte ATV trail.
- 59. As agreed to by the Applicant, Applicant shall design the Yuba Narrows crossing bridge to maximize, to the extent practicable, the ability of boats, water skiers, and other recreationists to pass under the bridge across the Sevier Bridge Reservoir.
- 60. As agreed to by the Applicant, Applicant shall coordinate with the Park Manager at Yuba Lake Recreation Area regarding schedule and access issues for boaters during construction. Warning devices will be installed to notify boaters of project-related bridgeconstruction activities.
- 61. As agreed to by the Applicant, Applicant shall ensure that public access roads to the Sevier Bridge Reservoir will remain open and will be signed for safety. If the rail line causes damage to existing facilities at the Painted Rocks Campground, the Applicant will be responsible for repairing or replacing damaged facilities including but not limited to the Painted Rocks Well, water pipelines, and water storage tank, septic systems, toilets, dump stations, roads, and campsites.
- 62. As agreed to by the Applicant, Applicant shall provide an at-grade crossing to maintain the continuity of the Paiute ATV trail. The crossing will be signed for safety. The Applicant will coordinate the design of the crossing with the landowner. The Applicant will install stop signs and appropriate railroad warning signs in conjunction with the rail crossing. If deemed appropriate, the Applicant agrees to improve the access road, associated fences, trees, and noise-mitigation structures along the 0.6-mile entrance to Painted Rocks Campground from SR 28.
- 63. As agreed to by the Applicant, Applicant shall consult with the Park Manager at Yuba Lake Recreation Area regarding construction activities and will attempt to schedule project-related construction activities to avoid peak use periods to the extent practical.

6.4.12 Aesthetics

- 64. As agreed to by the Applicant, Applicant shall develop all structural elements such as walls, bridges, and tunnels to harmonize with existing structures and other landscape elements in the study area. For instance, visual impacts to slope lengths will be reduced by leaving native boulders in place or by adding additional boulders to the slope. This practice will provide erosion control and add visual interest to the slope.
- 65. As agreed to by the Applicant, Applicant shall utilize cut techniques in rolling topography such as slope rounding, undulating the face and constant distance, as appropriate.
- 66. As agreed to by the Applicant, Applicant shall further soften slope cuts and stabilize by mulching the stripped vegetation and reapplying the mulch to the slope. Any slope cuts on public land administered by BLM will be restored to the original visual resource management (VRM) objective for that location as specified by appropriate BMPs and in the most recent Resource Management Plan.
- 67. As agreed to by the Applicant, Applicant shall, after project construction, landscape cutand-fill areas with appropriate native vegetation where practicable to make the area
 appear as natural as reasonably possible. Any slope cuts on public land administered by
 BLM will be restored to the original VRM objective for that location as specified in the
 most recent Resource Management Plan.

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